

ACROSS THE ATLANTIC IN ONE HUNDRED HOURS.

IT IS not improbable, the maritime experts say, that within the limits of that somewhat vague period, the "near future," the passage across the Atlantic by "Atlantic ferry" will be made in about four days, or at the most not to exceed 100 hours.

Peering into the new century and having in mind the grand achievements of its immediate predecessor, the nineteenth, this forecast should not be considered unreasonable. To do this, however, will necessitate an absolutely new class of ocean steamships, capable of maintaining an average speed of at least 30 knots an hour. Thirty knots, or official nautical miles, as calculated by the United States coast survey and the

tember last broke her own record by the trip from New York to Plymouth in 5 days 7 hours and 28 minutes, at an average speed of 23.36 knots, or nearly 27 miles per hour. She was then in close competition with the Kaiser Wilhelm der Grosse, whose highest average speed was 22.79 knots per hour.

The best time by any other ship up to that date was made by the Lucania—5 days 20 hours and 45 minutes—in 1895, though the Paris held the Atlantic record as far back as 1889 of 5 days 23 hours and 7 minutes. Great advance in ocean navigation has been made since the first steamer (an American vessel, by the way) crossed the Atlantic in 1818, and the first "liner"—which took

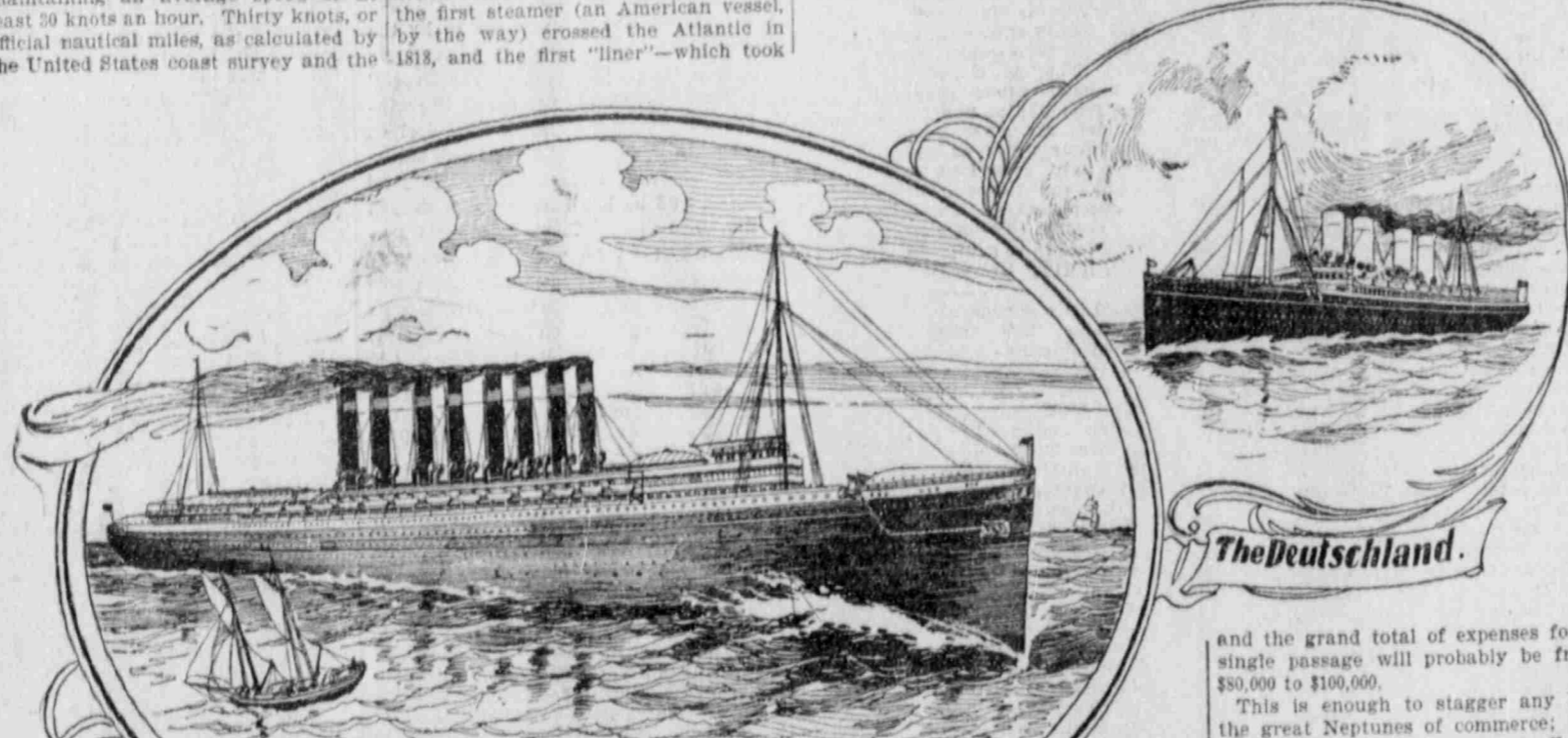
4 hours on an eastern trip, and on the following western passage brought it down to 4 days 5 hours and 31 minutes. A sister ship, the Umbria, went an hour better soon after, and in 1888 the Etruria did it in 6 days 1 hour and 50 minutes, holding the title of "Greyhound of the Atlantic" until the Paris made her great run of 5 days 23 hours and 7 minutes in 1895.

As to the steamship which the future will evolve for crossing the Atlantic in 100 hours, shipbuilders and engineers are in the main agreed that there must

be a radical departure from the present type—in fact, that the twentieth century ocean express will be in a class by herself, unique in every respect.

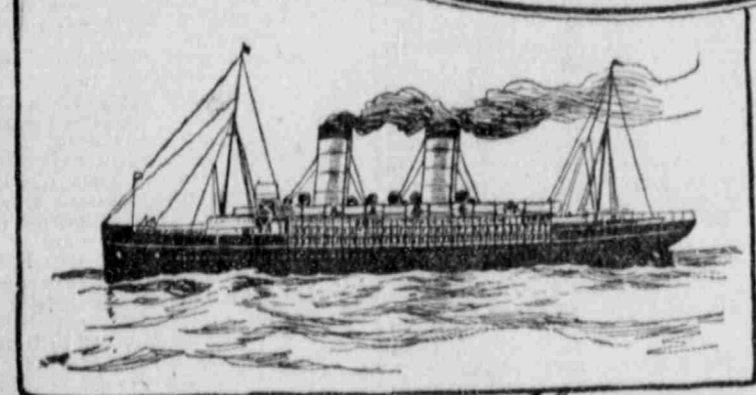
They also agree that the possible limit has been nearly reached in length and tonnage in the new Oceanic—17,000 tons, 704 feet long. The Deutschland is 16,200 tons and 686 feet in length, and the rival German line owning the Kaiser Wilhelm der Grosse has announced another ship to surpass her in every respect—728 feet in length, tonnage 18,000, speed 24 knots. She will be launched two years hence.

So long as the beam is not greatly increased, length and speed are in a measure correlated, and it has been calculated that the 20 knot express steamer must necessarily be over 900 feet long, about 90 feet beam and over 30 feet draft. Her displacement should be about 40,000 tons, as against the Deutschland's 23,000 and the new Invernia's 21,000. She cannot be used for cargo to any extent since her enormous proportions must be utilized to the utmost for engines, boilers, coal and fuel.



The Deutschland.

The Lucania
Twentieth Century Atlantic Liner.



British admiralty, would be equivalent to nearly 35 statute miles—80 miles for every 24 hours. This would be sufficient to cover in four days the distance across the Atlantic between any "fall the year" British port and New York, with a few miles to spare for detentions by the way.

The highest ambition of the Atlantic liners for the past ten years or so has been to reduce the average time between New York and the nearest British or European port to less than 120 hours. To accomplish this steamer after steamer has been built, with the result that records have been steadily lowered, and still the end of the century finds the five day record unattained. The best time up to date is that of the wonderful Deutschland, which in Sep-

tember last broke her own record by the trip from New York to Plymouth in 5 days 7 hours and 28 minutes, at an average speed of 23.36 knots, or nearly 27 miles per hour. She was then in close competition with the Kaiser Wilhelm der Grosse, whose highest average speed was 22.79 knots per hour.

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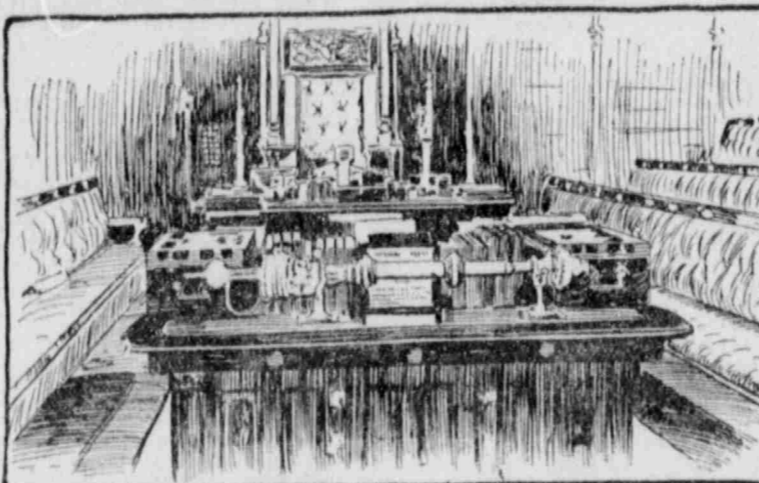
and the grand total of expenses for a single passage will probably be from \$50,000 to \$100,000.

This is enough to stagger any but the great Neptunes of commerce; but against this there should be set off the vast receipts from passengers and mails, possibly amounting to over \$200,000, and it will be seen that something should be left for interest on the cost of the ship (not less than \$5,000,000) and to pay running expenses.

Ship owners and builders are not now disposed to make large ventures in the direction of speed, at the sacrifice of space which this entails. They are waiting for some new development that shall give the requisite results with greater economy than at present is possible. In view of what has been accomplished by the inventor of those wonderful boats, the Turbinia and the Viper, which attained the unprecedented speed of 40 and 41 miles per hour on trial trips, it would seem that the engine of the future is to be like theirs—the rotary turbine system—though it has not yet been tried in vessels of large capacity. The great objection to them is their voracity, as they are perfect gluttons for coal, and no ship has yet been constructed sufficiently large to carry all the fuel she would need even in a four day trip and prove profitable at the same time.

The inventor of the rotary turbine has promised to attempt to curb the appetite of his engines and to adapt them for great liners, so there is every reason to believe that the hundred hour voyage will become an eventuality in the first decade of this century.

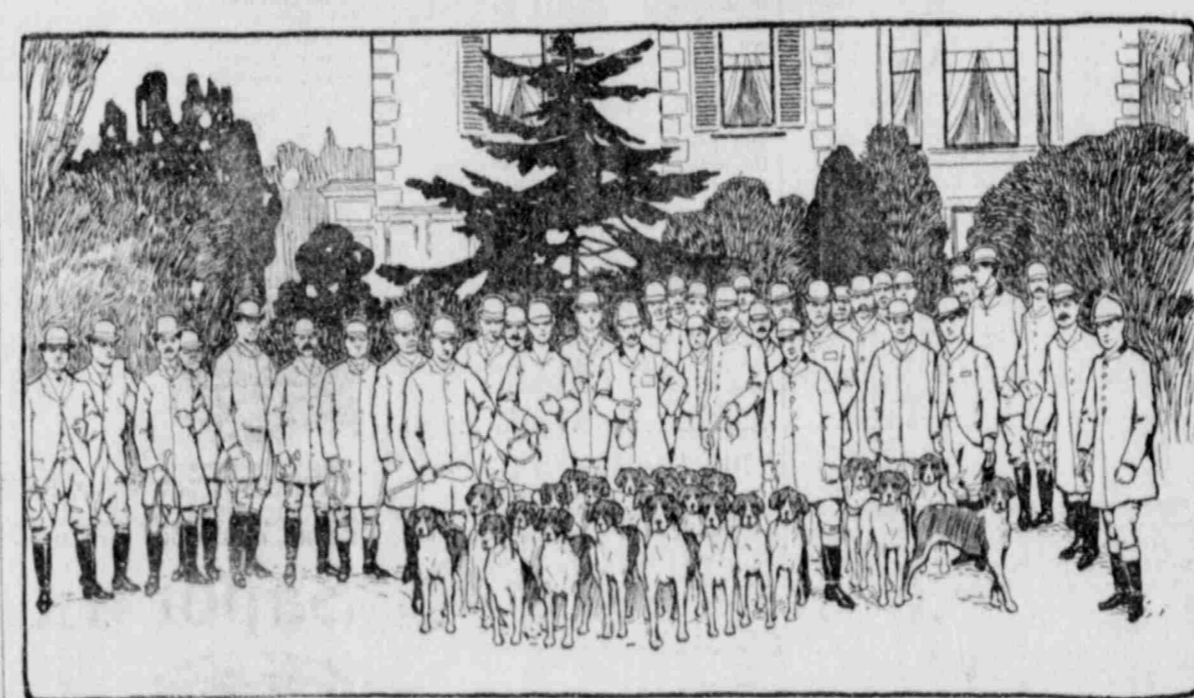
THE MACE OF THE HOUSE OF COMMONS.



In such countries as worship the emblem of power without inquiring as to its derivation the mace is a wonderful object, endowed with every attribute of authority. Such is the mace of the British house of commons, figured in this illustration from the only photograph ever taken. There is only one person permitted to take photographs in the house of commons, and that person is Sir Benjamin Stone, M. P., who has a monopoly of the strictest character. He can wander about and snap shot anybody and anything he chooses, from the bauble herewith represented to a member of the parliament. But let any other person try to get a snap shot on the fly, and the eagle eye of the proper functionary spies him out, and he is at once landed in "chokey."

The mace, as is probably known, represents delegated authority, sometimes of the crown and sometimes of parliament, and the mace on the table, either in the house of lords or commons, represents the authority of that house.

A PACK OF STAGHOUNDS GATHERED FOR A PHOTOGRAPH.



The fox hunting season has just ended, and poor Reynard has by this time probably learned what a hard world this is for such a being, even when a rival is employed in the shape of the antiseptic bag. The fox is the ostensible object of pursuit, but the antiseptic bag has long been recognized as a satisfactory substitute.

In this photograph of a pack of staghounds gathered to have "their picture taken" one can see how interesting the chase appears to the four footed hunters who run down the game. They know well enough that no harm is intended to the larger members of their family and that the stag is safe except from accident, so they enter into the sport with all their hearts.

Very few stags are taken in a season, for the quarry's quick ear detects the sound of galloping hoofs from afar. From some elevated position he is apt to spy the red coated horsemen racing in his direction, whereupon, with commendable alacrity, he makes himself scarce in that particular vicinity.

DESCENDANTS OF KRUGER.

When Oom Paul Kruger left Africa for Europe, he took with him, his lovely grandchildren, Miss Guttman and Mrs. Eloff, the latter being accompanied by her husband and two small children. There were three generations of Krugers in the party, representatives of two of them being shown in this por-



trait of Mrs. Eloff and her younger child. They do not "favor" the rugged old hero of the Boers, unless the child may be said to show a family resemblance, for the young ladies are very good looking, and nobody would suspect their relationship to one whose lineaments have made him famous—but not on account of great beauty.

In spite of their unsavory habits the Chinese often escape disease because the houses are well ventilated and the children receive a daily sun bath.

"LIKE FATHER, LIKE SON"—SECRETARIES AUSTIN AND JOSEPH CHAMBERLAIN.



AUSTIN CHAMBERLAIN.

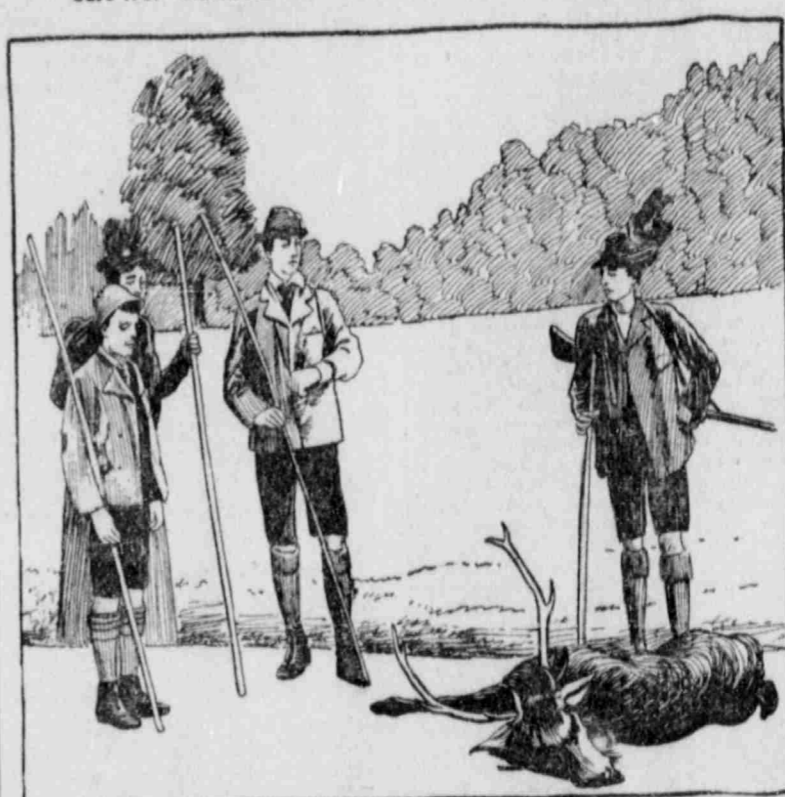
JOSEPH CHAMBERLAIN.

"Like father, like son," may well be quoted of Mr. Chamberlain, England's colonial secretary, and his eldest son, Mr. J. Austin Chamberlain, the financial secretary to the treasury department. According to their enemies, the son is almost an exact copy of the father, even to the inevitable monocle and the invariable accompaniment of the orchid which "Joey" always wears in his buttonhole. They even go further and charge that the son has adopted the business methods of his illustrious parent and has been interested in certain fat contracts of which the colonial department had the disposition in the South African war.

In the most recent attack upon him in the house of commons Chamberlain pere defended his "personal honor," which he assumed was impugned, but made no explanations satisfactory to his opponents. He stated, however, that his relatives were all business men and had to make their own fortunes. "I come," he said, "of a family which can boast of distinguished birth or inherited wealth, but has an unbroken record for nearly two centuries of unstained commercial integrity."

Mr. Austin Chamberlain is not far from 40 years old and a bachelor. Like his brother Neville and his sisters, he accepted the second marriage of his father with good grace, and all seem very much attached to their American stepmother, formerly Miss Mary Endicott, daughter of the late William C. Endicott of Salem, Mass., Cleveland's first secretary of war.

CROWN PRINCE OF GERMANY AS A HUNTSMAN.



Following in the footsteps of his illustrious father, the crown prince of Germany would be a mighty hunter. This illustration shows a trophy of his prowess—he at least is credited with it—in the handsome elk that was laid low by a rifle shot while being driven up to the concealed hunters in the forest.

Elk hunting by royalty, however, is on a par with all the other sports of that character in which they indulge, as, for example, the so called "chase of the boar," of which the emperor of Germany is so fond. When let alone, the wild swine of the imperial preserves become as fat and as tame as ordinary pigs. But to prevent an onslaught from an old tusked small fort of earth and logs have been built at frequent intervals, into which the emperor can dodge if hard pressed. As the kaiser is rather weak in one of his arms, he does not always hit the game that is driven up for him to shoot; but, all the same, his royal relatives feel sure of receiving the customary boar's head at Christmas as a testimonial of his skill and regard.

HOW THEY SALUTED THE QUEEN.

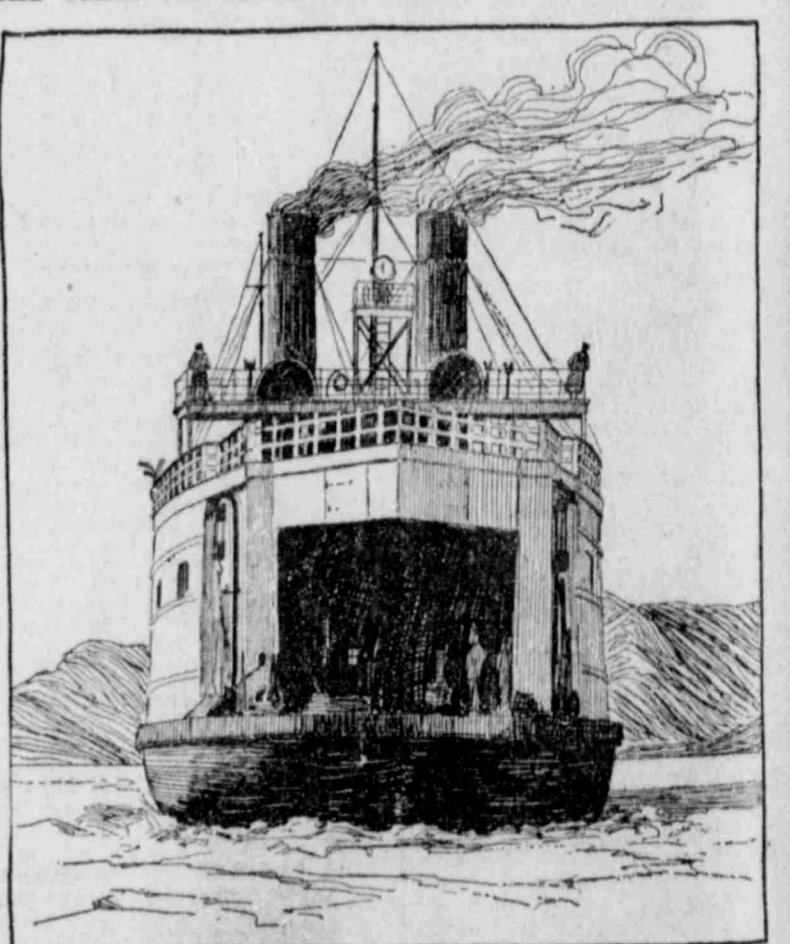
A pretty story is told of two little girls who attracted Queen Victoria's attention one day when she was out driving at Osborne. On her return she sent for the children, requesting that they might come by themselves, without the restraint of governess or mother. They had never spoken to a queen before, but they had learned their Old Testament and thought that the greeting fitted to a king might also be correct for a queen. So when, hand in hand, they came into the room where Victoria was waiting to receive them, they fell on their knees, exclaiming together, "Oh, queen, live forever!"

Needless to say, her motherly majesty was delighted at the quaint salutation and expressed her pleasure in a way the children are never likely to forget.

LABOR SCARCE IN HAWAII.

There is a great demand for hands by the planters in Hawaii. No less than 20,000 men are needed there in the cultivation of sugar, and efforts are making to secure them in this country.

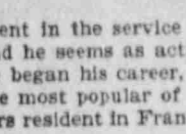
THE GREAT ICE BREAKER FERRYBOAT ON LAKE BAIKAL.



One of the most important breaks in Russia's 4,000 mile railroad across Siberia is at Lake Baikal, 13,000 square miles in area and twice as wide as the English channel at Dover. Though the plans call for a railroad around the lake to connect the termini, yet at present a trip is necessary across it. But as the lake is frozen over every year at or near the middle of December a specially designed boat for the transportation of trains was needed. This want has been supplied by the great ice breaker boat, the Baikal, figured in the accompanying illustration. It has three lines of track on its main deck, and the trains enter at the bow, as it is run against the pier. The boat has two powerful short bladed propellers at the stern and in addition another screw at the bow, which sucks away the water from beneath the ice and causes it to split of its own weight. Then the heavily loaded boat crashes through the three feet of ice with ease at a speed of 13 miles an hour. Its direct course from shore to shore is 23 miles, and as the ice closes in behind the boat after each transit a new waterway has to be broken every trip.

DEAN OF THE DIPLOMATS.

The dean of the world's diplomatists at the time of his recent retirement was Prince Munster, late German ambassador to France. He was not only the oldest, but at the same time one of the tallest members of the diplomatic body and is distinguished by his commanding presence. He was born in England 80 years ago and is looked upon as a true cosmopolitan, inasmuch as his parents were Hanoverians, his first wife was a Russian and his second an English woman. Thirty of his 80 years have been spent in the service of his fatherland, and he seems as active today as when he began his career, retiring as one of the most popular of the foreign ministers resident in France.



AN EGYPTIAN FUNERAL.

This snap shot, which was taken from inside a carriage in the principal street of Alexandria, shows how reluctant the Egyptian Arab pursues his subjects, even to the grave. It shows, also, the peculiar manner in which the Egyptian Arab is carried to his last resting place. The bier is borne by his four nearest relatives, the head of the corpse being directly beneath the curious protuberance standing up from the front part of the casket. Such other relatives as the deceased may have left to bewail his taking off follow on foot, chanting in a monotone.

Robbing graves is the only crime under Chinese law for which the thief may be justly killed on the spot by any one finding him out.

COOKING HIPPOPOTAMUS MEAT IN A CANNIBAL CAMP.



This illustration depicts a camp scene in Africa. It shows a collection of cannibals engaged in cooking big flakes of hippopotamus flesh. Their dependence in general, according to a traveler who found them out, had been human flesh, and the transfer of their affections from the succulent steak cut from a captive of their own species to the comparatively tough hippo meat indicates progress toward civilization. This change was due to the efforts of the advance parties of the Cape to Cairo telegraph, who turned the negroes from the error of their ways. One of that party describes the scenes he witnessed as exceedingly revolting. This telegraph line, by the way, is now in operation to a point beyond Lake Tanganyika, about 1,400 miles from Cape Town.

FOR BUSY READERS.

It is estimated that 1,000 deer have been killed in the Maine woods the present season, the hunters being mostly from other states.

The Vermont house has evidenced its admiration for the distinguished services of Brigadier General Emerson H. Liscum, a native of Vermont, by adopting a resolution authorizing the governor to have General Liscum's portrait

pointed at the expense of the state and hung in the statehouse.

Spanish Carlists have an eye to business. The first thing done in the recently suppressed little uprising was to issue a postage stamp. It is blue, with the head of the pretender and the inscription, "Dios, Patria y Don Carlos Rey."

A balloon fitted up with automatic in-

struments was sent up recently in Paris and came down safely. The instruments showed that it had risen to 55,000 feet, or over ten and a half miles. At that height the temperature outside the balloon was 162 degrees below zero.

Count Tolstoi divides his time each day in exactly the same manner. He writes until 2 o'clock in the afternoon—the dinner hour—after which he takes a short rest, followed by a walk and conversation with visitors. Supper is

served at 9 p. m., and the count does not retire until a late hour. He has given up cycling. Almost every day he receives visits from friends and acquaintances.

A pupil at the public school in Armstrong, Me., refused to study Latin and was expelled. His father, a Methodist preacher, took the matter before the board, with the result that Latin is now an optional study.

The boundary line between the United

States and Mexico has recently been resurveyed and marked by stone monuments in the form of obelisks located about five miles apart. The shafts are 10 feet high, 4 feet square at the base and 2 feet at the top and stand on foundations 5 feet square.

The Tri-state Medical association of Tennessee, Alabama and Georgia at its recent session in Chattanooga took steps to secure medical legislation in those states for the purpose of regulat-

ing or prohibiting the marriage of habitual criminals, persons afflicted with incurable diseases, drunkards and victims of harmful drugs.

Emigration from Hungary has assumed unusual dimensions lately. During one month 15,591 passes were issued to intending emigrants.

Frogs in Korea do not hop or jump. They walk like well ordered animals, quietly placing one foot before another until they arrive at the end of their

journey. It is an amusing sight to one who has always seen the frog of America jump.

A recent European invention is a process for making artificial sponges. The method is based on the action of zinc chloride on cellulose, by which spongy compounds similar to starch are produced. These products when placed in water swell and in an atmosphere sufficiently dry become hard again.